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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,449	02/19/2002	Gary W. Ferguson	FET 345	9169

7590 07/16/2004

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EXAMINER

DAVIS, DAVID DONALD

ART UNIT

PAPER NUMBER

2652

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

10/079,449

Applicant(s)

FERGUSON, GARY W.

Examiner

David D. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

BEST AVAILABLE COPY**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/22/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. Receipt is acknowledged of the Information Disclosure Statement (IDS) received March 22, 2002, April 18, 2002 and August 8, 2003.
2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892 or on form PTO-1449, they have not been considered.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-11, 13, 18, 19 and 21-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo (US 5,538,773. As per claims 1 and 21, Kondo shows in figure 3 a disk

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data storage media including a disk 21 having first and second disk surfaces and an edge surface 23 with at least one of the first and second disk surfaces and the edge surface 23 being formed to store data.

As per claims 2, Kondo describes in column 6, lines 50-54 that the disk edge surface 23 stores data magnetically. As per claim 3, Kondo describes in column 6, lines 50-54 that the disk edge surface 23 stores data optically. As per claim 4, Kondo describes in column 6, lines 50-54 that the disk edge surface 23 stores data magneto-optically. As per claim 5, Kondo describes in column 6, lines 44-49 that the disk edge surface 23 stores data by inscribed markings. As per claim 6, Kondo describes in column 6, lines 44-54 that data is imparted to the disk edge surface 23 in a process selected from the group consisting of physical, magnetic, kinetic, thermal and optical processes. As per claims 7, Kondo describes in column 6, lines 44-54 that the disk edge surface 23 is readable and writable. As per claim 8, Kondo describes in column 6, lines 44-54 that the disk edge surface 23 is read only.

As per claim 9, Kondo shows in figure 3 that the disk edge surface 23 is enlarged. As per claim 10, Kondo shows in figure 3 that the enlarged disk edge surface 23 is formed by increasing the thickness of the disk adjacent the disk edge. As per claims 11 and 13, Kondo shows the enlarged disk edge surface 23 being formed by creating an angled annular surface extending from at least one of the first and second disk surfaces.

As per claim 18, Kondo discloses that the disk edge surface 23 is formed to receive material having a surface to store data. As per claim 19, Kondo describes in column 6, lines 44-54 and shows in figure 4 the disk edge surface 23 is formed with a groove to receive a band of material having a surface to store data.

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As per claim 22-31, Kondo discloses in column 5, line 55 through column 6, lines 3, a method of storing additional data on disk data storage media in the form of a disk with first and second disk surfaces having at least one data storage surface comprising storing data on the edge surface of the disk. Kondo also discloses the step of forming a data storage surface on the edge surface of the disk including the steps of preparing the edge surface of the disk; and applying a surface for storage of data to the edge surface. Kondo additionally discloses the step of applying a surface includes bonding material with a data storage surface to the edge surface 23.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12, 14-17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo (US 5,538,773). Kondo discloses the claimed invention. See section 5, supra. However, Kondo is silent as angled surfaces that define a generally triangular cross-section having an apex at the edge surface 23 of the disk. Kondo is also silent as to edge surface being at least two layers.

Official notice is taken of the fact that generally triangular cross-section and an edge surface with two layers is notoriously old and well known in the disk art.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the disk of Kondo with a generally triangular cross-section as

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taught in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a generally triangular cross-section, which is well within the purview of a skilled artisan and absent an unobvious result, so as to provide a more aero dynamic disk.

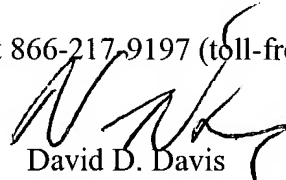
It also would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the edge of Kondo with at least two layers as taught in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide an edge of a disk with two layers, which is well within the purview of a skilled artisan and absent an unobvious result, so as to allow for more data to be stored on the edge of the disk.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is (703) 308-1503. The examiner can normally be reached on Monday thru Friday between 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David D. Davis
Primary Examiner
Art Unit 2652

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